Masami MIZUSHIMA* : **Critical studies on Japanese plants.** (1)

On some species of *Boehmeria*, *Viola* and *Paris*.

水島正美*：日本植物寸評 (1)

1) **Boehmeria holosericea** Blume: Satake, Boehmeria Japonica in Journ. Fac. Sci. Imp. Univ. Tokyo sect. 3, **4**-6: 530 (1936); in Journ. Jap. Bot. **14**: 513 (1938) -Koidzumi in Act. Phytotax. Geobot. **10**: 220 (1941).

var. **izuosimensis** (Satake) Satake et Mizushima, stat. nov.

B. izuosimensis Satake, l. c. 532, fig. 51, 52 (1936).

By the senior author, *Boehmeria izuosimensis* which was based upon the specimen collected in isl. Ohshima, prov. Idzu, was distinguished from *B. holosericea* which has ovate and obtuse-based leaves by short petioles 1-3 cm long, and ovate-cordate leaves. But the type specimen is rather a depauperated individual collected at a barren situation. The shape of leaves varies a good deal; in *B. izuosimensis*, the middle leaves have the length nearly equal to or shorter than the width and the base rounded-cordate, rounded or rarely truncate. While in *B. holosericea*, the length is almost always longer than the width and the base is broad cuneate, rounded or rarely rounded-cordate. In the lower leaves, the ratio of the length and the width seems to be a character distinguishing both species constantly; the length in *B. izuosimensis* is shorter than the width, and the length in *B. holosericea* is nearly equal to or often longer than the width. As the result of our observation in isl. Ohshima, we came to the conclusion that *B. izuosimensis* is better to be regarded as an insular variety of *B. holosericea*. This variety has not been reported from the mainland of Hondo.

2) **Viola mandshurica** W. Becker var. **boninensis** (Nakai) Mizushima, stat. nov.

V. boninensis Nakai in Bot. Mag. Tokyo **36**: 37 & (84) (1922).

Hab. Hondo. Prov. Kazusa: Kanaya ad littorem. Prov. Izu: Shirahama; insulae Ohshima, Hachijo et Aogashima.

Bonin: insulae Chichijima et Hahajima.

Viola boninensis, growing on or near the seashore, was based upon three sheets of specimens from islands of Hachijo, Chichijima and Hahajima and was distinguished from *V. mandshurica* in having smaller flowers, shorter elliptical capsules and thick lustrous leaves which are long deltoid or hastate at the base even in the flowering season. On examining a large number of specimens including the original ones, I failed to find any prominent distinguishing characters between *V. mandshurica* and the plant under discussion. The flowers of *V. boninensis* vary in size from 12 to 24 mm long, and are quite similar to *V. mandshurica.* The fruits are 6 to 11 mm long in *V. boninensis,* and in *V. mandshurica* they are 6 to 10 mm long. The leaves of *V. boninensis* are not always long deltoid or hastate at the base in the flowering season, they vary in length 1.3 to 3.3 times longer than width and 2 to 2.5 times longer generally. In *V. mandshurica,* on the other hand, the length of leaves are 1.3-5-(8) times longer than the width and 3 to 4 times longer in general. The base of leaf-blades in *V. boninensis* is hastate to broad cuneate but often shows a tendency to have the cordate base, while that of *V. mandshurica* is broad cuneate to rounded-truncate, rarely shallowly cordate.

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The lustre of leaves on the upper surface, however, is doubtlessly a distinguishing point; I cultivated the material from isl. Hachijo for four years and from Kanaya for three years, but the deep green, rather strongly glossy and impressed nerved leaves appeared every year. The hairiness varies remarkably in *V. mandshurica* but not so considerable in *V. boninensis.* Ultimately *V. boninensis* is separable from *V. mandshurica* only in having lustrous leaves, and it is better to be referred, I think, to a littoral or insular variety of the wide-ranging species, *V. mandshurica.*

3) **Viola Selkirkii** Pursh forma **subglabra** (W. Becker) Mizushima, stat. n.

V. Selkirkii var. *subglabra* W. Becker in Fedtschenko, Fl. Asiatic Russ. **8**: 73, fig. 14 (1915).

V. Selkirkii var. *glabrescens* W. Becker et Hultén in Ark. f. Bot. **22** A, no. 3: 8 (1928)-Hultén, Fl. Kamtch. **3**: 139 (1929).

Hab. Yezo. Prov. Ishikari: Kamui-mura, Kamikawa-gun; mt. Inkarushipe; Sapporo. Prov. Shiribeshi: Yoichi; mt. Tengu.

Hondo. Prov. Mutsu: mt. Hakkoda. Prov. Rikuzen: Matsushima. Prov. Echigo: mt. Yahiko. Prov. Iwashiro: inter Oze-numa et Oze-ga-hara. Prov. Shinano: mt. Tateshina.

I sent a flowering specimen collected in the Oze district bordering the provinces of Kozuke and Iwashiro in central Hondo by Dr. H. Hara and myself on June 17, 1951 to Dr. E. Hultén of Stockholm, asking him to compare it with his var. *glabrescens,* and he kindly wrote to me in his reply as follows: "The specimen of *Viola* from Ozegahara high moor agrees well with *Viola Selkirkii* var.

glabrescens Beck. & Hult. from Kamtchatka. It has somewhat more hairs in the margin of the leaves near the base than most Kamtchatkan specimens, but there is a certiain variation in this respect."

This plant has hitherto been known exactly only from Kamtchatka at an altitude of 600–700 m, and is considered to be a higher mountain form of the species. In the Oze district, however, it grows on thick humus forming a colony, with rose purple flowers, as an undergrowth of *Fagus crenata* forest with scattered *Abies Mariesii* at about 1500 m above the sea level, and the mother species is often met within the conifer-zone over 1600 m where *Abies Mariesii* is dominating and also in lower latitudes.

This form differs from the mother species, so far as the Japanese plant is concerned, in having leaves which are quite glabrous or sparingly pilose only on the margin near the base of blades, the top of petioles or rarely near the base of auricles above, while in the mother species naked leaves appear only when chasmogamic flowers have finished.

It will be noticeable that the bracteoles on the scape with cleistogamic flowers are generally sharply pointed at the top in the specimens of Hondo, but abruptly blunt topped in the ones from Yezo and Kuriles, and in this character the latter is nearer than the former to the typical North American form of this species.

4) **Paris tetraphylla** A. Gray f. **corollata** Mizushima, forma nov. (Fig. 1)

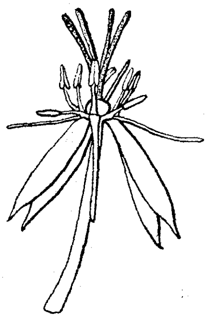

Fig. 1 Flower (×4/3).

A typo recedit petalis anguste linearibus flavoviridibus habet. Haec forma *Pari verticillati* M. Bieb. simillima est, sed exqua connectivis antherae haud elongatis tantum mucronulatis bene distinguitur.

Hab. Hondo. Prov. Sagami: in monte Kamiyama ad ca. 1100 m (Mizushima, Maio 19, 1951 - typus in Herb. Fac. Sci. Univ. Tokyo).

The present form is characterized by the presence of narrow linear petals, and they vary in length from 6 to 10 mm long even in one and the same flower but always shorter than sepals. In the locality above cited, this form is rarely found mixed with a normal apetalous one on thick humus in forests. The presence of petals in this species is a monstrous case, but it may be regarded as an atavism of a latent organ. The petals are present in most species of *Paris*, therefore a normally apetalous *P. tetraphylla* is rather a special type within the genus.

It is remarkable that leaves of this species on Mt. Kamiyama are rather narrower, oblong-lanceolate and about 15 mm wide, compared with those of the other localities. Though such narrower-leaved individuals are occasionally found here and there in the whole range of this species mixed with a normal broad-leaved form, most of them seem to me to be exceptional depauperated ones. There is nowhere else in my knowledge where a form with narrower leaves is prevailing, and Miquel's var. *angustifolia* is applicable to this form.

1)　**オホシマヤブマヲ**　本種は本州，四國，九州に廣布するオニヤブマヲとは單に葉形に差があるに過ぎず，一般にオホシマヤブマヲでは一個體中の多くの葉に於いて長さは幅に等しいか又は短く，葉脚は淺心形又は截形のことが多い。それに對してオニヤブマヲは葉長は幅に比して殆ど常に長く，葉脚は鈍〜圓形をなすことが多く稀に淺心脚になる。然し此の場合にも葉の長さと幅との比を併せ考へれば十分に辨別出來る。瘦果の形質は割に變化が大で區別點となる特徵を摑み得なかつた。結局オホシマヤブマヲはオニヤブマヲの島嶼型として認むべきであらう。尙細胞學的にオニヤブマヲは三倍體である事が分つて居るが，オホシマヤブマヲの方は未だ調べられて居ない。

2)　**アツバスミレ**　中井先生の原文から判斷するとアツバスミレは八丈島產の有果標本１枚と小笠原父島,母島產の有花,果の標本一枚宛とを基礎として記載された。そして果實は八丈島の個體に就いて，花は母島の個體に依つて，葉は３枚の標本夫々から記されたものであることが分る。然し其の後に集つた標本と生品に就いての觀察とよりして，アツバスミレは東亞大陸側にも廣く分布するスミレ(ケスミレ，ケナシスミレ)とは葉面に光澤があり，概ね質が厚くて長さと幅との比がより小さく，又基脚が心狀又は稍耳狀をなす傾向が多少見られる點で異るに過ぎぬと思ふ。上總金谷の海岸からの數株を３年，八丈島產の種子からの材料を４年間栽培したが，每年光澤ある厚質の葉を出し,半陰地に置いても同様の葉を出し固定した形質と見る事が出來る。又スミレと同じく有毛，無毛の兩形があるが，一般に葉身だけは無毛である。北海道禮文島から記載されたアナマスミレ *V. mandshurica* var. *crassa* Tatewaki は葉が厚く萼片が大きい點でケナシスミレと區別されたもので，葉面の光澤の有無は不明である。結局アツバスミレはスミレの海岸，島嶼型として認めることが出來，平行的變異として北方にアナマスミレを見ることになる。

スミレに就いては滿洲產のものはダフリア區にのみ有毛形がある譯ではなく，北支區，滿洲區にもそれが見られる。但し滿洲，朝鮮產のものには日本產のものに折々見る如き多毛の個體は少くとも標本上には示されない。毛の點に關しては本邦產品は大陸側と同じく分布上の差別がなく，有無兩形が混在する樣に思ふ。又無毛と言つても往々にして葉柄基部の邊に僅少の毛を生ずるので，その有無は品種の形質と見るべきであらう。

3)　**ハダカミヤマスミレ**（新稱）北海道，本州の亞高山帶に普通なミヤマスミレは花

期の葉や花莖に白長毛を散生するのを常とするが，それに混じて時折全株無毛又は葉脚や葉柄頂に極く少量の毛を生ずるに過ぎぬ個體がある。此の形は Becker がシベリア(1915) とカムチャッカ (1928) とから別個に發表した無毛形に相當すると思はれる。Miquel が更に古く日本產のものに基いて無毛形を記して居るが，之は Becker が基準標本を檢して別種のものと言つて居るのでそれに從つた。從來我が國では有毛形から區別して扱はれたことはないが，此處に品種として再認したい。併し有毛形も花期が過ぎれば往々にして全く無毛の葉を出すので注意を要する。

4) **アヒダ(間)ツクバネサウ** (新稱) 箱根神山のツクバネサウが一般に細葉形として表現されて居ることは興味あることゝ思ふが其の中に稀に花冠を持つ個體が見出される。無論葯隔は伸長して居ないから一見クルマバツクバネサウと分ち得るが，祖先返りの一種として一顧の價値があらう。各瓣は一脈を有し，基脚が互に連結して環狀をなす樣で，此の點は雄芯圈に似て居る。

○イワタラとツチタラ (前川文夫) Fumio MAEKAWA: Possible affinity of Japanese vernacular names for *Aralia* and *Aruncus*.

ヤマブキショウマの羽越地域における方言イワタラと食用とについては本誌 **21**: 94 (昭 22) に書いたが語源については觸れなかつた。村松七郎氏は同じく本誌 **7**: (308) (昭 7) に石川理紀之助「救荒食圖解」を紹介して岩たらに觸れ岩上に生ずるタラノキの意としたが特に岩上とする程岩場に限つたものではないので釋然としなかつた。近日和名鈔にウドを指してツチタラ (豆知多良) というのを見て，はじめて氷解した。イワタラは古語が恐らくそのまゝ傳來したものでこのツチタラと對立して存在するものと思われウドが腐植の豊かな土 (最も土らしい土) に生ずるに反しイワタラはそれより遙かに岩礫のまじつた斜面に寧ろ多いから，その意味でイワに生ずるタラであろう。數回出の三出羽狀葉は極めて明瞭な共通特徵であり，共に若い芽と葉を食用にする。裏日本の北半は古語保存地域の一つである可能性を增したといえる。(東京大學理學部)